June 2023 Commentary

Global Macro Policy Quarterly

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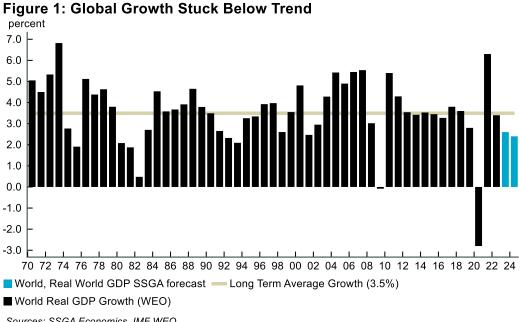
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Global Macro Highlights

The global economy has dodged a couple of bullets since our last quarterly update. The banking turmoil that had enveloped the US in March and then spread to Europe was contained with surprisingly little visible side effects so far. The US debt ceiling debacle, which had tested investors' nerves and had the potential to unfold in a materially severe manner, was similarly sidestepped. Emboldened by the macro resilience and, frustrated that inflation isn't subsiding fast enough, major central banks have continued with the monetary tightening exercise, in some cases coming back to it after a brief hiatus. The tone remains decidedly hawkish.

But all is not well. Admittedly, our global growth forecast has ticked up a tenth since March, but this is an insignificant improvement that does not alter the far more salient point that growth has slid well below trend. China's disappointing recent performance may have garnered the lion's share of attention in regard to growth vulnerabilities, but businesses and consumers everywhere are being increasingly constrained by the high cost of borrowing. Demand is not collapsing, but it is slowing. Most importantly, it will continue to slow in the months ahead even as disinflation offers a welcome support to real incomes. With debt servicing costs skyrocketing, even if from low levels, the next chapter in the story has to do with a deterioration in credit quality. This need not be dramatic. Big variations in starting point for household indebtedness and business leverage also mean that the story unfolds at different speeds across geographies and sectors, but the direction of travel is broadly shared and is one of deterioration.

This awareness leaves us uneasy, especially in light of the March banking turmoil episode. Because it is not enough for things to look good in the aggregate: no crisis starts in the aggregate, but rather it is always ignited by a weak link. And as pressures grow from the rising cost of capital, the pressure grows, and those weak links get tested. And so, we would consider it a surprise if by the time of our next update we won't have some new "surprising" development to report on.



Sources: SSGA Economics, IMF WEO

Summary of World Output¹ and Inflation²

(Annual percent change)

	Weight			History			Fore	cast
	(2021)	2018	2019	2020	2021	2022	2023	2024
World Growth	100.0	3.6	2.8	-2.8	6.3	3.4	2.6	2.4
Advanced Economies	41.2	2.3	1.7	-4.4	5.2	2.7	1.2	0.9
US	15.2	2.9	2.3	-2.8	5.9	2.1	1.2	0.5
Euro area	11.8	1.8	1.6	-6.3	5.3	3.5	0.7	1.1
Germany	3.2	1.0	1.1	-4.1	2.6	1.8	-0.1	1.3
France	2.2	1.8	1.9	-7.7	6.4	2.5	0.6	1.0
Italy	1.8	0.8	0.5	-9.0	7.0	3.8	1.5	1.1
Japan	3.7	0.6	-0.4	-4.3	2.2	1.0	1.5	1.1
UK	2.3	1.7	1.6	-11.0	7.6	4.1	0.4	1.1
Canada	1.4	2.8	1.9	-5.1	5.0	3.4	1.0	0.6
Australia	1.0	2.8	1.9	-1.8	5.2	3.7	1.2	1.6
Developing Economies	58.8	4.6	3.6	-1.8	6.9	4.0	3.6	3.5
China	18.9	6.7	6.0	2.2	8.4	3.0	4.9	4.6
Advanced Economy Inflati	on 41.2	2.0	1.4	0.7	3.1	7.3	5.1	2.6
US	15.2	2.4	1.8	1.3	4.7	8.0	4.0	2.3
Euro area	11.8	1.8	1.2	0.3	2.6	8.4	5.8	2.4
Germany	3.2	1.8	1.4	0.5	3.1	6.9	6.0	2.4
France	2.2	1.9	1.1	0.5	1.7	5.2	5.0	2.5
Italy	1.8	1.2	0.6	-0.1	1.9	8.2	6.3	2.3
Japan	3.7	1.0	0.5	0.0	-0.3	2.5	2.8	1.8
UK	2.3	2.5	1.8	0.9	2.6	9.1	7.2	2.9
Canada	1.4	2.2	2.0	0.7	3.4	6.8	4.1	2.5
Australia	1.0	1.9	1.6	0.9	2.9	6.6	4.0	2.5
Developing Economies	58.8	5.0	5.1	5.1	5.9	9.8	6.6	3.9
China	18.9	2.1	2.9	2.4	0.9	2.0	1.0	2.0
Value of World Output (\$	trl)							
At Market Exchange Rates		86.0	87.3	84.9	96.3	100.2	108.8	115.3
At Purchasing Power Pari	ties	129.8	135.7	133.4	147.9	163.5	177.5	188.1

¹ Real GDP; 2 Consumer Price Inflation

Weight is the share of world GDP on a purchasing power parity basis (IMF World Economic Outlook) Historical data sources: Oxford Economics, IMF. Forecast: SSGA Global Macro and Policy Research

Politics and Geopolitics

Geopolitics of the Energy Transition Remains Fraught

The recent soft patch in global energy prices should be viewed as a temporary mirage. Indeed, global macro data confirms that aggregate demand for oil remains subdued and that there is a small, albeit meaningful oversupply in global markets. This price softness should last at least beyond the end of this year and if a US downturn materializes, extend for most of 2024 as well.

However, this short-term view ignores the structural shifts in global oil production. Geopolitics has exacerbated the volatility of global oil supply, as exhibited by inconsistent OPEC+ policy – a much larger and less cohesive group than the OPEC core. The uncertainties around production capability weigh on Russia, which therefore has chosen to maximize output ahead of structural decline due to a shortfall of expertise and key inputs affected by Western sanctions. In addition, US production has still not recovered its pre-pandemic high with the bulk of shale basins now at a mature stage. US production is destined to plateau and drop in the absence of much higher capex. And this does not seem forthcoming in an era of decarbonization that alters the financial calculations for US shale oil producers.

In short, a structural shortfall in oil supply awaits us unless the energy transition is accelerated so that global oil demand does not outpace supply. This requires a continued expansion of renewable energy capacity – which is itself tied to a limited set of natural resource inputs. The most recent Critical Materials Assessment of the Department of Energy has now examined the energy supply dependency of these inputs.

MEDIUM TERM 2025-2035



Source: US Department of Energy 2023 Draft Assessment of Critical Materials, <u>2023 Critical Materials Assessment (energy.gov)</u>

Figure 2 above illustrates the US government evaluation of the range of raw materials in terms of importance to energy and the concomitant supply risk over the coming decade (near-term is less relevant given inventories). The result is that 55% of the top 22 metals are viewed as both very important to future energy complex as well as highly vulnerable to supply disruption.

The simplistic geopolitical conclusion would be that areas with large deposits of these 12 metals and minerals are likely to face increased tensions as the respective power blocs wrestle over control or access. China produces more than half the world's graphite supply and even higher shares of rare earths such as Dysprosium, Neodymium and Praseodymium. And the US and Russia together account for about half of Nickel production. So that leaves seven metals worthy of further analysis, but we do not think any of them meet all conditions necessary to trigger geopolitical conflict.

In contrast to oil or gas, the role of these metals in the value chain is different. In addition to extraction, metal processing is far more relevant and specialized than in energy. Again, China currently processes the majority of Lithium and Cobalt that goes into renewable infrastructure but does not hold a monopoly on this processing. Lithium deposits, in particular, are relatively well distributed globally, so do not lend themselves well to geopolitical competition. In contrast, Palladium production is relatively concentrated in Russia and South Africa. So, a small subset of resources are indeed exposed to supply squeezes.

However, this analysis ignores the following. First, we do not know the actual elasticity of supply for many of these materials. Until recently, they were relatively niche and did not attract large capital. This is rapidly changing, and numerous new deposits are being discovered across the metals landscape. Second, even those that face genuine low supply elasticity may not maintain the criticality in energy they carry today. In plain English, oil is oil, but batteries are not batteries. The latter have substitutability, e.g., switching from Lithium-Ion to Nickel-Cobalt if the economics in one no longer work. And third, the big lesson from the shale revolution is that the current assessment is based on 2023 technology. There is enormous R&D across the renewables sector, which is likely to fuel (pun intended) both gains in supply capacity as well as demand (by optimizing usage of these metals). The magnitude of this innovation is unknown, but the direction is clearly toward less dependency than currently imagined.

So, the good news is that geopolitical troubles will remain a feature of fossil fuels more than post-fossil energy. But none of this is to say that this will be cheap. It will not. The energy transition will lift the floor on fossil fuels and the various supply squeezes in key metals will episodically push inflation for renewable inputs. This will find expression in structurally higher commodity prices—though beware the traps of metals most exposed to substitutability. And finally, fundamental analysts will do well to identify the growth assets positioned to capture future innovation.

Country Macro Highlights

Please see country-specific commentary in the sections below.

US: Confused Gyrations

The first half of 2023 has already delivered more than a year's worth of dramatic twists and turns for the US economy and markets. The data flow over the past few months can only be described as contradictory and confusing, the sense of directionless augmented by unprecedented data revisions. This is not typically a discussion topic vis-à-vis the US economy, but the breadth and magnitude of data revisions this year puts them front and center in any cogent debate about the outlook. It all adds up to a message of caution for economists and investors alike: take every data release with more than the usual grain of salt, be prepared for the data to change, and avoid big bets. Identify the trends that have staying power and anchor your macro narrative and investment views on those.

In our view, the over-arching trends shaping up the outlook are the steady withdrawal of liquidity from the system and the normalization of supply chains and demand patterns post Covid. The combination equates to the same dual result we highlighted in this publication six months ago: slowdown and disinflation. In some way, a lot has happened over the past six months; yet in another, we are simply further along the same path we were already travelling then.

Disinflation remains our highest conviction macro view; so far, despite the noise and market overreaction to every data print, inflation data has actually come in close to our expectations. The 4.0% 2023 average headline inflation forecast from March remains unchanged. Late last year we called for a sub-3.0% print on headline CPI inflation by the end of 2023; that still looks achievable. Although core CPI inflation remains elevated at 5.3% y/y as of May, we are sanguine on the trajectory from here because we do not believe goods disinflation has fully run its course, we anticipate material disinflation in shelter inflation in coming months, and already see signs of disinflation in non-housing services. The latter has long been highlighted by the Fed as an area of sticky inflation due to elevated wage inflation in the space. But in our view, the Fed is too worried about wage inflation.

To be sure, one of the biggest questions for economists, investors, and policy makers alike, is whether it is possible to bring wage inflation down without a sharp increase in unemployment. Historically, the latter has been needed to accomplish the former. We have long argued that it might be possible to accomplish this now thanks to a broad process of normalization post-Covid. The experience of the past year is supportive in this regard—at least if one used average hourly earnings as a measure of wage inflation. What remains unclear is whether <u>enough</u> wage disinflation can be accomplished this way to bring inflation back to target. This is indeed an area where data evidence has been shifting massively with revisions. Figure x below shows the last four iterations of unit labor cost estimates for the United States. The swings have been extreme! The last data suggest until labor cost growth is approaching a range consistent with a 2.0% inflation target...but will the signal persist through the next update?

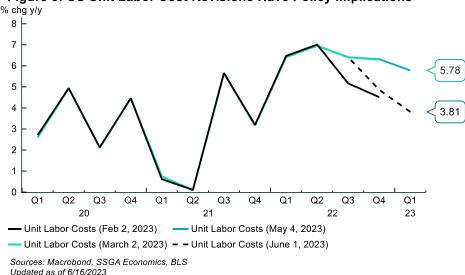


Figure 3: US Unit Labor Cost Revisions Have Policy Implications

We likely are more hopeful than most on this question, but nonetheless believe that some labor market slackening is needed to bring about sufficient wage disinflation. And herein lies the irony: the latest summary of economic projection from the Fed represents the ultimate soft-landing scenario. Despite an even higher Fed Funds pathway, the unemployment rate ticks up a mere four tenths in 2024, to 4.5%. That's lower than where we have it going, with fewer hikes this year and more cuts in 2024! That does not seem internally consistent. Which is not a fundamental flaw but rather, the reflection of the compilation process for the "median" view. It should, however, be understood for what it is and taken with caution.

Recession risks have risen but recession is not a high conviction view for us. Our readers will recall that it was the banking turmoil that marked the turning point and finally tipped our estimated odds of recession over the next 12-18 months to above 50% in March. But because of the labor market resilience, the attempted bottoming out of residential investment, pent-up motor-vehicle demand, and delayed trickle of fiscal support from previously approved packages (CHIPS Act, IRA), we always stressed that, absent a systemic risk event, recession was not an imminent scenario but rather something we worried about for late 2023 and in 2024.

The banking turmoil had the potential to become systemic but was contained quickly; the debt ceiling had the potential to become a genuine disaster but turned out rather benign. As such, the short-term outlook is slightly brighter than three months ago and we have raised the 2023 growth forecast by three tenths to 1.2%. However, we lowered the 2024 forecast by two tenths to 0.5%. Why? Because the broad slowdown story remains very much in play. While the acute phase of the banking crisis may be over, its impact lives on in the economy in the form of tighter credit conditions. Even more importantly, the cost of credit has risen to restrictive levels for both businesses and consumers. It is not a coincidence that real equipment fixed investment in the GDP accounts is now marginally contracting on a y/y basis and that small business loan demand is collapsing. While moderating inflation will prop up real incomes, we do anticipate an uptick in unemployment rate to a little over 4.0% by the end of this year (in line with the Fed) and reaching close to 5.0% by end-2024 (higher than the Fed).

We are of the view that the Fed has done enough and that the hiking cycle should be over (indeed, that it should have ended in March!). However, the signals from the June meeting were very hawkish as the additional 50 basis points worth of hikes embedded in the new dot plot considerably raise the risks that the Fed will end up hiking again. The flow of data remains critical. While we continue to see clear evidence of progress on inflation, given the Committee's hawkish inclinations, what we'll be getting between here and the July 26 meeting may not be enough to preclude a July hike. Indeed, a July hike may only be precluded by another episode of market stress/turmoil—which could easily occur.

Ironically, despite the surprise to markets and despite the fact that we think the Fed shouldn't do more, adding two hikes to the dot plot is a more compelling and consistent message than adding just one. We had always found the idea that the Fed pauses only to come back for a mere 25 basis point hike unconvincing monetary policy simply isn't so precise! If a terminal upper bound rate of 5.25% is not enough, do we really have high conviction that 5.50% is? The answer is no. As such, unless the FOMC as a whole believed that at least 50 basis points worth of extra hikes were needed, the best course of action in our view was to do nothing. The pause would actually be the end to tightening—this had been our call for some months. Now that the FOMC has signaled they indeed believe 50 bps more are needed, the question for is whether they will deliver. If these hikes are so needed, why delay them? Maybe all the FOMC really wants to do is a single more hike, but were fearful of precisely the rationale above and felt a more powerful signal was needed. Time will tell. July 26 is not that far off but the last few months have clearly shown that much can happen in a short period of time. A July hike is a high probability scenario, but it is not a given.

With attention so focused on the near-term hiking trajectory, the discussion about how quickly the first cut happens has been put on the back burner. But that is the more important debate and the next big chapter around policy rates globally. For a very long time we pinned the first cut at the end of 2023; markets have now essentially priced that out but we suspect we have not seen or heard the last on this topic. We remain surprised by how quickly everyone seems to have moved past the bank turmoil episode as we are convinced other risks lurk beneath the surface. Pushing ahead with further tightening will only exacerbate those vulnerabilities. And so, the longer and more aggressively the Fed hikes, the more abrupt the shift to cuts will likely become. Timing any of this is exceedingly difficult, particularly in a world where data revision can substantially alter the assumed path from one week to the next, but the story for 2024 remains one of considerably more easing than the 100 basis points the Fed's SEP has built in. For now, we are sticking with 200 basis points worth of cuts through the end of next year.

Canada: Catch-22

Risks of a recession have been kept at bay so far this year, in good part due to migration, but this has also contributed to elevated inflation. So, should the central bank continue to raise interest rates to bring inflation to target? And will inflation respond to higher interest rates when there is such insufficient housing supply? Add in the special feature of Canadian CPI basket – the mortgage interest costs (MIC) and it is the perfect Catch-22 macroeconomy! We however expect the economy to fare better than what we expected in March while inflation should

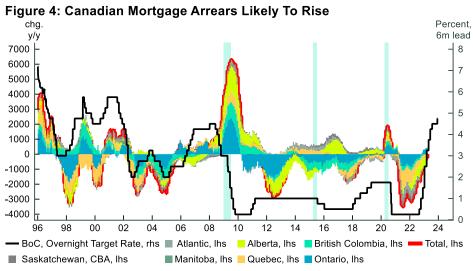
continue to mean revert. The Bank of Canada (BoC) may have to hike one more time, but rates are certainly slated to remain high for longer.

Growth: In light of robust incoming data, we've doubled our 2023 growth forecast to 1.0%. However, with the bulk effects of tighter monetary policy yet to be felt, we downgraded 2024 growth projections materially to just 0.6%. Household consumption growth will slow to 2.0% y/y in Q4 from an average of 4.7% since 2022 as lower savings will weigh on discretionary spending. The 4.0% y/y jump in Q1 (largely attributed to pent-up demand for cars) seems unsustainable.

Business investment and intentions remain modestly elevated, and we expected its growth to remain weak during the next two years. Residential investment may also remain on weak footing but should improve as the housing market is short of supply. Cooling global appetite for goods consumption could mean that Canadian export growth may moderate to 2.0% too from an average of 3.8% since 2022. However, government consumption growth may remain firm at 1.0%, although still slower than 1.5% since post-Covid recovery.

Housing sector: High interest rates, elevated material costs, and labor supply limitations are constraining new housing supply and lengthening completion times. Housing starts have slowed and will likely continue to do so. Given that housing demand is very high, and supply is constrained by high interest rates, prices may reaccelerate. However, price increases may be limited both by affordability constraints and a possible increase in supply from foreclosures.

In fact, home sales were up significantly by 5.0% m/m in May and are rebounding from a recent bottom and prices are down 8.6% y/y but improved sequentially. Even the number of transactions improved by 1.4% y/y, the first positive print in almost two years. So, we think residential investment will remain on weak footing this year but improve in 2024. Simultaneously, the decline in mortgage arrears has reversed; arrears are poised to rise further, if the BoC hikes more & holds peak interest rates for a long time. Considering the early revival, it is worth waiting a few months to see how the price-action evolves.



Sources: SSGA Economics, CBA, BoC, Macrobond Updated as of 6/16/2023

Labor market: The labor market remains very tight, but employment declined by 17k in May, the first decline since August 2022. Leading indicators imply some softening in the labor market is in order.

Inflation: Consumer price inflation peaked at 8.1% y/y in June 2022 and slowed to 4.4% y/y by April. However, the combined contribution from food and shelter has increased over this period and has approached 60% for the fifth month. Nonetheless, we expect inflation to continue easing over the next full year as solid declines in both agricultural commodity and home prices lead the respective CPI components with a reasonable correlation. Add in the BoC's hawkish pivot in June and their tone about holding peak interest rates, we think inflation will have to ease materially. We expect headline CPI to average 4.1% y/y in 2023 and then down to 2.5% in the next year.

There are risks in shelter, food and also transportation prices. Nearly a million people migrated to Canada last year and are challenged to find affordable housing. However, monthly rental prices tracked by rentals.ca imply that annual growth in rents has cooled to 6.5% y/y in May after peaking at 12.4% in December 2022. Recall that it was the time when we got outsized labor market beats. We think that rents should be cooling gradually and in the best-case scenario, home prices may continue to ease modestly (and not rise) if more mortgage holders burdened by higher payments decide to come to market. Finally, retail auto sales continued to trend higher strongly in May, as was tracked by MarkLines but we suspect that this strength could be exacerbated by seasonal factors.

Interest rates: In June, the BoC surprised markets by hiking the benchmark interest rate by 25 bps to 4.75%. However, guidance from Deputy Governor Paul Beaudry after the release of the Economic Progress Report indicated that the Bank would take a cautious meeting-by-meeting approach to incoming data. We think another such surprise may interfere with the mean reverting inflation as rents and MICs may rise, an undesirable outcome. Hence, although we think the Bank may hike interest rates one final time in July or August to a terminal of 5.0%, we favor peak rates at the current 4.75%.

UK: The Cost of Resilience We had made a significant upgrade to UK's 2023 growth forecast last quarter, noting the welcome resilience demonstrated by high-frequency data at the start of the year. This quarter, there is little change to the growth forecast (merely a one tenth upgrade to 0.4%), a slightly larger one to the inflation forecast (up four tenths to 7.2%), but a more consequential one to the policy interest rate path. What we saw as welcome resilience three months ago, may be "too much" resilience insofar as it comes hand in hand with persistently elevated wage growth and inflation. In other words, resilience comes at a cost: more hikes by the Bank of England.

We have added two hikes to our terminal rate expectation and now see the hiking cycle ending at 5.00%. This remains below market pricing, which (as of June 16th) indicates the hiking cycle will extend into 2024, with the Bank Rate peaking at 5.8%. We believe that is too much given challenges to growth, the lagged effects of earlier tightening, and the delayed adjustment to declining imported inflation. For all the resilience discussed above, GDP growth has averaged a mere 0.1% q/q over the past year and household consumption has been essentially flat over that same period. This was highlighted in a recent speech by Governor Baily, who noted that

the UK's failure to return to its pre-pandemic GDP peak "sets the United Kingdom apart from other advanced economies. Both the euro area and especially the United States have more than recovered the economic ground lost in the pandemic."

105 l 100 95 90 85 80 70 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 United Kingdom, Real GDP Index, SA Sources: Macrobond, SSGA Economics, ONS

Figure 5: UK's Post Covid Recovery Has Fizzled Out

Updated as of 6/16/2023

The combined impact of high inflation and higher borrowing costs has weighed on domestic activity and loan demand. Net new lending secured by dwellings actually declined outright in both March and April; aside from July 2021, when loan demand was normalizing following a tax incentive-induced spike, there had been no monthly declines in this series since late 2010! Given the elevated level of household indebtedness, rising debt servicing costs will continue to weigh on consumption. Meanwhile, it is true that fixed investment has done well, but the pace of gains seems likely to slow as the cost of capital rises and the competitive advantage conferred by a previously depreciating currency wanes.

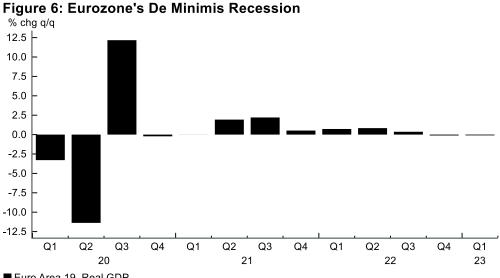
That leaves the labor market as the most important determining factor in respect to the persistence of inflation and the extent of needed additional tightening. Several recent speeches by BoE officials have recently highlighted the tension between lagged moderation in prices as input cost inflation eases, and risks of "second round effects" as workers seek to rebuild purchasing power by seeking higher labor income. In a sense, the UK can be thought of having experienced the worst of both worlds on inflation as it has—in the words of Jonathan Haskel—"a US-style tight labor market, and a European-style tight energy market".

Signs that the labor market is loosening some momentum are there, but they are still rather incipient. Perhaps the most convincing one so far has been the steady decline in vacancies, now down for twelve straight months and more than 250,000 lower than in May of 2022. Even so, the unemployed per vacancy rate has only ticked up minimally, from an average of 1.0% in 2022 to 1.2 in the latest reading. Pre-Covid norm was close to 2.0. Employment gain remain robust, although a shift toward more part-time jobs adds to the message that underlying labor demand is

diminishing at the margin. Meanwhile, the participation rate has ticked up to now stand at the highest level since May 2020, suggesting some improvement in labor supply. It is unclear whether this is driven by increased immigration or a higher participation rate among existing workers, perhaps reflecting a need to boost real disposable incomes. Either way, it helps. However, it is not helping fast enough because wage inflation has so far failed to show a convincing and sustained downshift. In fact, average weekly earnings (regular pay, excluding bonuses) grew 7.5% y/y at the last count, matching the high reached in the spring of 2021. This is why the BoE has little choice but lean harder against inflation.

Eurozone: A "De Minimis" Recession

The string of upside GDP surprises in the eurozone, so dominant in 2022, has finally buckled. Revised estimates show the regional economy shrank 0.1% q/q in the first quarter, one tenth less than previously estimated. In reality, the change from 0.1% to -0.1% has primarily symbolic significance as it now puts the eurozone in the feeblest of technical recessions: two consecutive quarters of negative GDP growth. In this case, two consecutive -0.1% prints. There is no denying that the pace of growth is decelerating, but we think that the underperformance in the first quarter was made considerably worse by a big drag from inventories and a big decline in government consumption. Neither are likely to present similar headwinds consistently. Instead, we would highlight the 1.1% q/q growth in fixed investment, and the 0.3% q/q gain in household consumption. All in all, small adjustments in different directions for the member countries resulted in the same 0.7% 2023 forecasted growth rate we put forth in March. Germany is a little worse—indeed, we now once again anticipate an incremental GDP contraction—but Italian growth has revised higher on buoyant investment and support form service industries.



■ Euro Area 19, Real GDP

Sources: Macrobond, SSGA Economics, ECB

Updated as of 6/16/2023

The inflation picture is also little changed. Estimates for both this year and next ticked up by an insignificant one tenth to 5.8% and 2.4%, respectively. Headline inflation is well off October's 10.6% y./y peak and read 6.1% y/y in May. Core inflation has been slower to descent but it, too, has now put in a top and is in the process of gradual

normalization. However, just as in the UK, we have added two additional rate hikes to our expected terminal rate level. Back in March, we thought that amid the banking turmoil, only one additional hike would be delivered in May. Since then, the ECB delivered not only the May hike, but another one in June. Despite the apparent top in core inflation, given the labor market resilience and push to higher wage agreements, the ECB does not feel comfortable that its job is done yet. We have long argued that at these levels, interest rates become genuinely restrictive for both businesses and consumers. However, the constraints may not become immediately apparent because of households' steady labor incomes, relatively low levels of indebtedness and still robust savings. As such, we pencil in another hike in July and see material odds of yet one more in September.

Japan: Unhurried

In a world of rapidly changing macroeconomic landscape, our bright assessment of Japan' economy remains in place. The key question for markets will still be how monetary policy evolves and our expectations of Yield Curve Control (YCC) adjustments in the next few months remain firm. Our base case now shifts to the July meeting, as the Bank of Japan (BoJ) maintained its policy in June.

Growth: We expect household consumption to continue driving growth, in part supported by better wage outcomes from the *shunto* wage negotiations. Household consumption is still recovering from the pre-pandemic levels on a steady uptrend; we expect it to average 2.1% y/y in 2023, higher than the historical average of 1.5% and then cool to 0.9% in 2024. Consumption recovery in Japan is quite underrated, so much so that consumption levels are now better than they are in Germany and the UK! Exports will face headwinds as global demand cools, but we still think they will rise 2.4% y/y in 2023, below the historic average of 4.4% and then slow to 1.5% in 2024. Capital expenditures are expected to remain firm and help business investments support GDP. All this mean a modest upward revision of one-tenth percentage point to our 2023 growth forecast, now at 1.5% while 2024 growth remains unchanged at 1.1%.

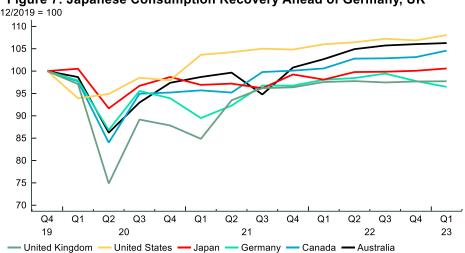


Figure 7: Japanese Consumption Recovery Ahead of Germany, UK

Sources: SSGA Economics, ABS, StatCan, DESTATIS, CAO, BEA, ONS, Macrobond Updated as of 6/16/2023

Inflation and the BoJ: We are more confident that inflation dynamics in Japan have shifted to a higher equilibrium and will remain elevated in the next two years. Hence, we upgrade our CPI forecasts for 2023 and 2024 to 2.8% and 1.8% respectively. On the demand side, higher wage growth is expected to drive inflation in staple items in the consumption basket. Also, returning tourists are likely to drive services inflation, such as accommodation and transport. On the supply side, we expect gas and electricity prices to rise from June on the phasing out price controls.

The Bank of Japan (BoJ) in its June 16 meeting maintained its policy, against our expectations of a surprise. The Bank noted "extremely high uncertainties" and left the door open for future policy revisions. We have already noted the Bank's increased confidence in inflation and price pass-through within the economy.

Nonetheless, the YCC amendments are still a matter of time, and we expect them during the July meeting. Given that this is also the consensus, we may expect market pressures to intensify in the days leading to the meeting. Governor Ueda hinted at the possibility of these adjustments to come as a surprise and noted that "positive signs were emerging from corporates' price, wage setting behavior." As such, many life insurance companies started increasing their JGB holdings.

As GDP remains resilient to an external slowdown and inflation remains sustainably elevated, we expect the BoJ to exit negative interest rate policy in 2024. However, the unhurried nature of monetary policy underscores the fact that the BoJ can afford to tolerate above target inflation for a longer period than other central banks. We do not expect that inflation gets out of control in Japan, but key risks to the outlook remain external in nature.

Australia: Hawkishness Overscore Our outlook on the Australian economy has weakened again for three reasons. One, household consumption outlook has deteriorated; two, a slower than expected recovery in China and three, we worry that the Reserve Bank of Australia (RBA) will hike more and keep rates at a restrictive level for a longer period—the most significant headwind to growth as it will weaken the already feeble household consumption. But the biggest risk we see is that the combination of record population growth and insufficient supply may aggravate the housing crisis.

Growth: We now forecast GDP to grow 1.2% y/y in 2023 before picking up to 1.6% next year. We see an increased probability of a technical recession and the risks are skewed to the downside. Household consumption will rise just 1.4% y/y, much below the 5.9% average since 2022. High frequency consumption indicators are tracking consumer spending below 2022 levels already. Business investments have been driven by capex in infrastructure, mining and renewables so far, while dwellings investments may take nearly a year to reaccelerate. However, amid high interest rates, we expect the overall investment outlook to weaken too. Furthermore, exports have risen 10.8% y/y in Q1, likely due to base-effects as they fell 4.6% in Q1 2022. These effects are set to fade out for the rest of 2023; given that the recovery in China has been below expectations, exports may rise just 3.2% y/y this year against 5.0% average since 2022.

Labor market: Employment data for May showed that the economy added 75.9 thousand jobs, much higher than the consensus of 15 thousand. The participation

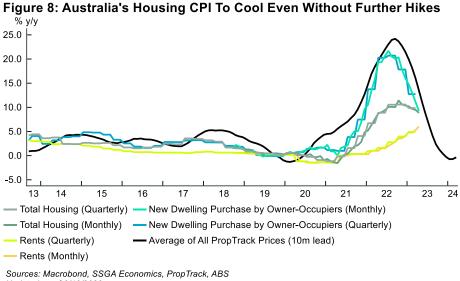
rate recorded a historic high of 66.9% and the unemployment rate fell to 3.6%. However, leading indicators paint a softening outlook. While the NAB Business Survey's employment index declined 7 points to just +4, similar index tracked by the Australian Industry Group has fallen 12.1 points into contraction. Also, the government's own Leading Indicator has fallen for the fifteenth month in June. Despite the apparent contradiction in May, we expect employment growth to slow down below its long-run growth of 2.2% y/y.

Demographics, housing, and inflation: The Australian Bureau of Statistics noted that population rose by almost half a million people in 2022, with migrants accounting for 77% of the increase. We cannot envision housing supply catching up to the resulting demand in the next 12 months. Interest rates are at multidecade highs, building approvals are stuck at lows and most construction is stuck in the pipeline. The average of real-estate prices tracked by Proptrack in all regions is down just 5.65% from their peak and just about 30% mortgages remain at risk; so, while there is scope for prices to cool further, they may have plateaued.

In light of the record migration, vacancy rates have collapsed to 1.2% in May. Resultingly, rental affordability in the ANZ CoreLogic data is the worst since June 2014 as nearly a third of average income is now required to service a new rental lease. The RBA expects rents to rise 10% while the consumer inflation for the component in Q1 rose at 4.9% and has not peaked yet.

We think there is a clear need for government action to curtail rents; according to a Guardian poll, 60% people want to freeze rental increases and cap immigration until affordability increases. A higher temporary skilled migration income threshold (a minimum income companies have to guarantee before the government issues a temporary skilled visa) is set to rise by 30% to A\$ 70,000 from July. We think this higher requirement will curtail migration in the months ahead.

Inflation and RBA: In light of the above discussion, the CPI inflation in the housing—especially rents, is in focus for the RBA. Still, inflation was already on a normalizing path and, we see a risk of a worsening housing crisis if interest rates will be hiked more. Inflation in all components excluding housing (77.8% weight in the CPI basket) has been retreating from respective peaks. Within housing (22.2%), the CPI component of new dwellings purchased by owner-occupiers (highest weight of 8.62% in overall CPI basket) has been easing from 20.7% y/y in August last year and is currently at 12.7%. Rents CPI, is yet to peak, but, given that its weight in the overall CPI basket is just 5.75% today, down from 7.10% before the pandemic, we see less scope for an overall surprise due to rents.



Updated as of 6/16/2023

So, CPI will remain on an easing path even if the RBA simply maintains the current cash rate of 4.1%. However, markets are currently pricing two more hikes as the communication from the central bank has been rather hawkish. For our part, we think the RBA may hike once more in July and see a chance of the central bank tidying up the cash rate by 15 bps to a terminal of 4.50% subsequently, just when incoming data may start deteriorating materially. And then, the important question for the Australian economy will be-how much worse could the outlook get?

Data Calendar

Week in Review (Jun 12- Jun 16)

Country	Release (Date, format)	Consensus	Actual	Last	Comments
Monday,	June 12		•		
US	Monthly Budget Statement (May, \$ bn)	-236.0	-240.3	-88.842	Quite bad.
JN	PPI (May, y/y)	5.6%	5.1%	5.9% (↑)	Mean-reverting.
AU	Westpac Consumer Conf Index (Jun)	na	79.2	79.0	Weak on hawkish RBA hike.
AU	NAB Business Confidence (May)	na	-4	0	Weak on hawkish RBA hike.
Tuesday,					
US	NFIB Small Business Optimism (May)	88.5	89.4	89.0	Watching hiring and capex plans.
US	CPI (May, y/y)	4.1%	4.0%	4.9%	Consensus expectation seems like best case scenario.
UK	Average Weekly Earnings (Apr, y/y, 3m)	6.1%	6.5%	5.8%	Stubbornly high wage inflation.
UK	ILO Unemployment Rate (Apr, 3m)	4.0%	3.8%	3.9%	Too much resilience?
GE	CPI (May, y/y, final)	6.1% (p)	6.1%	7.2%	Rapidly moderating now on base effects/
GE	ZEW Survey Expectations (Jun)	-13.5	-8.5	-10.7	Welcome upturn.
Wednesd	lay, June 14			· ·	
US	PPI Final Demand (May, y/y)	1.5%	1.1%	2.3%	Continues to ease.
US	FOMC Rate Decision (Upper Bound)	5.25%	5.25%	5.25%	We also anticipate a pause, watching the dot plot.
UK	Industrial Production (Apr, m/m)	-0.1%	-0.3%	0.7%	Soft.
EC	Industrial Production (Apr, m/m, sa)	0.9%	1.0%	-3.8% (↑)	Challenged.
JN	Core Machine Orders (Apr, m/m)	3.0%	5.5%	-3.9%	May bounce back. Orders are robust in general.
AU	Employment Change (May, thous)	17.5	75.9	-4.0k (↓)	Big beat, most gains were permanent.
AU	Unemployment Rate (May)	3.7%	3.6%	3.7%	Still, leading indicators indicate cooling labor market.
Thursday	v, June 15		•	•	
US	Retail Sales Advance (May, m/m)	-0.2%	0.3%	0.4%	Surprising strength given price moderation.
US	Import Price Index (May, y/y)	-5.6%	-5.9%	-4.9% (↓)	Continues to ease.
US	Initial Jobless Claims (Jun 10, thous)	245	262	262 (†)	Watching whether uptrend quickens.
US	Continuing Claims (Jun 03, thous)	1,768	1,775	1,755 (↓)	Gentle uptrend.
US	Empire Manufacturing (Jun)	-15.1	6.6	-31.8	OK, but little signal.
US	Philadelphia Fed Business Outlook (Jun)	-14.0	-13.7	-10.4	Far from great.
US	Industrial Production (May, m/m)	0.1%	-0.2%	0.5%	Far from great.
US	Business Inventories (Apr, m/m)	0.2%	0.2%	-0.2% (↓)	No big changes.
CA	Housing Starts (May, thous)	240.0	202.5	261.4 (↓)	Could be treading water.
CA	Manufacturing Sales (Apr, m/m)	-0.2%	0.3%	0.8% (↑)	Need to slow for CPI outlook.
CA	Existing Home Sales (May, m/m)	12.1%	5.1%	11.3%	Zig zagging, but improving.
EC	ECB Main Refinancing Rate (Jun 15)	4.00%	4.00%	3.75%	A more cautious tone is warranted.
FR	CPI (May, y/y, final)	5.1% (p)	5.1%	5.9%	Trending lower.
JN	Tertiary Industry Index (Apr, m/m)	0.4%	1.2%	-1.5% (↑)	Good support to Q2 growth.
Friday, Ju	une 16				
US	U. of Mich. Sentiment (Jun, prelim)	60.0	63.9	59.2	Inflation expectations eased.
EC	CPI (May, y/y, final)	6.1% (p)	6.1%	7.0%	As already reported.
FR	Wages (Q1, q/q, final)	1.8%	1.9%	0.7%	Material acceleration in Q1.
JN	BoJ Policy Balance Rate	-0.1%	-0.1%	-0.1%	Focus shifts to the July meeting now.

Source: for data, Bloomberg®; for commentary, State Street Global Advisors Economics.

Data Calendar

Week In Preview (Jun 19 – Jun 23)

Country	Release (Date, format)	Consensus	Last	Comments
Monday, J	June 19	- I		
US	NAHB Housing Market Index (Jun)	51.0	50.0	
CA	Industrial Product Price (May, m/m)	na	-0.2%	Should cool.
CA	Raw Materials Price Index (May, m/m)	na	2.9%	Should cool on easing goods prices.
Tuesday,	June 20			
US	Building Permits (May, thous)	1,425	1,417 (↑)	
US	Housing Starts (May, thous)	1,395	1,401	
GE	PPI (May, y/y)	1.7%	4.1%	
JN	Industrial Production (Apr, m/m, final)	-0.4% (p)	1.1%	A tick up will mean resilient demand in the economy.
JN	Capacity Utilization (Apr, m/m)	na	0.8%	Should expand.
Wednesda	ay, June 21			
CA	Retail Sales (Apr, m/m)	0.3%	-1.4%	Downside surprise will imply cooling Q2 GDP.
UK	CPI (May, y/y)	8.4%	8.7%	
Thursday,	, June 22		•	
US	Initial Jobless Claims (Jun 17, thous)	260	262	One of the most important indicators at the moment.
US	Continuing Claims (Jun 10, thous)	1,785	1,775	
US	Existing Home Sales (May, m/m)	-0.7%	-3.4%	
US	Leading Index (May, m/m)	-0.8%	-0.6%	This looks scary, but does it mean what it used to?
US	Bank of England Bank Rate	4.75%	4.50%	More hikes in store.
UK	GfK Consumer Confidence (Jun)	-26.0	-27.0	
FR	Business Confidence (Jun)	100.0	100.0	
JN	National CPI (May, y/y)	3.2%	3.5%	CPI from June will tick up, but expect an upside surprise.
JN	Manufacturing PMI (Jun, prelim)	na	50.6	Looking for some resilience.
Friday, Ju	ne 23			
UK	Retail Sales Inc Auto Fuel (May, m/m)	-0.2%	0.5%	
UK	Manufacturing PMI (Jun, prelim)	46.8	47.1	
UK	Services PMI (Jun, prelim)	54.9	55.2	
EC	Manufacturing PMI (Jun, prelim)	44.8	44.8	
EC	Composite PMI (Jun, prelim)	52.5	52.8	
EC	Services PMI (Jun, prelim)	54.4	55.1	
GE	Manufacturing PMI (Jun, prelim)	43.5	43.2	
GE	Services PMI (Jun, prelim)	56.2	57.2	
FR	Manufacturing PMI (Jun, prelim)	45.2	45.7	

Source: for data, Bloomberg®; for commentary, State Street Global Advisors Economics.

Economic Indicators

Central Bank Policy Targets											
Region	Target		Year/Year % Change in Target								
		Jan	Feb	Mar	Apr	May					
US	Target: PCE price index 2.0% y/y	5.4	5.1	4.2	4.4						
Canada	Target: CPI 2.0% y/y, 1.0%-3.0% control range	5.9	5.2	4.3	4.4						
UK	Target: CPI 2.0% y/y	10.1	10.4	10.1	8.7						
Eurozone	Target: CPI below but close to 2.0% y/y	8.6	8.5	6.9	6.9	6.1					
Japan	Target: CPI 2.0% y/y	4.3	3.3	3.2	3.5						
Australia	Target Range: CPI 2.0%-3.0% y/y	7.0	7.0	7.0							

Source: Macrobond

Key Interest Rates											
	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23
US (top of target range)	2.50	2.50	3.25	3.25	4.00	4.50	4.50	4.75	5.00	5.00	5.25
Canada (Overnight Rate)	2.50	2.50	3.25	3.75	3.75	4.25	4.50	4.50	4.50	4.50	4.50
UK (Bank Rate)	1.25	1.75	2.25	2.25	3.00	3.50	3.50	4.00	4.25	4.25	4.50
Eurozone (Refi)	0.50	0.50	1.25	1.25	2.00	2.50	2.50	3.00	3.50	3.50	3.75
Japan (OCR)	-0.01	-0.04	-0.07	-0.06	-0.08	-0.02	-0.01	-0.01	-0.03	-0.07	-0.07
Australia (OCR)	1.28	1.81	2.25	2.58	2.84	3.05	3.10	3.29	3.54	3.60	3.83

Source: Macrobond

General Government Structural Balance as a	%of Potent	ial GDP							Fore	cast
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
US	-2.5	-3.6	-4.3	-5.1	-6.0	-10.7	-10.7	-5.9	-6.6	-6.7
Canada	0.0	0.0	-0.3	0.0	-0.2	-8.1	-3.3	-1.2	-0.5	-0.1
UK	-2.5	-1.6	-1.3	-1.4	-1.6	0.8	-3.6	-4.5	-4.3	-2.8
Eurozone	-0.5	-0.5	-0.4	-0.3	-0.5	-4.0	-3.8	-2.8	-3.1	-2.5
Germany	1.2	1.2	1.1	1.6	1.3	-2.9	-3.0	-2.6	-3.2	-1.4
France	-2.1	-1.9	-1.9	-1.5	-2.1	-5.8	-5.2	-4.4	-4.6	-4.1
Italy	-0.4	-1.0	-1.5	-1.6	-0.9	-6.1	-6.7	-2.4	-2.0	-3.0
Japan	-4.5	-4.5	-3.7	-3.0	-3.3	-8.1	-6.2	-7.8	-6.4	-4.1
Australia	-2.5	-2.2	-1.5	-1.1	-4.0	-7.9	-6.1	-3.5	-3.3	-2.9

Source: International Monetary Fund, World Economic Outlook

Headline Consumer and Producer Price Inflation

		CPI Year/Year % Change					PPI Year/Year % Change				
	Jan	Feb	Mar	Apr	May		Jan	Feb	Mar	Apr	May
US	6.4	6.0	5.0	4.9	4.0		5.7	4.7	2.7	2.3	1.1
Canada	5.9	5.2	4.3	4.4			4.8	1.4	-2.2	-3.5	
UK	10.1	10.4	10.1	8.7			13.4	11.9	8.5	5.4	
Eurozone	8.6	8.5	6.9	6.9	6.1		14.8	12.7	5.6	1.0	
Germany	8.7	8.7	7.4	7.2	6.1		16.6	13.5	6.7	4.1	
France	6.0	6.3	5.7	5.9	5.1		14.9	13.4	9.5	5.0	
Italy	10.0	9.1	7.6	8.2	7.6		11.1	9.6	3.7	-1.5	
Japan	4.3	3.3	3.2	3.5			9.6	8.3	7.4	5.9	5.1
Australia	7.0	7.0	7.0				5.2	5.2	5.2		

Source: Macrobond

Economic Indicators

Real GDP Growth (Q/Q Seas	onally Adjusted)
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		Quarter/Quarter % Change						Year	/Year % Ch	ange	
	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23		Q1-22	Q2-22	Q3-22	Q4-22	Q1-23
US	-0.4	-0.1	0.8	0.6	0.3		3.7	1.8	1.9	0.9	1.6
Canada	0.6	0.9	0.6	0.0	0.8		3.2	4.7	3.8	2.1	2.2
UK	0.5	0.1	-0.1	0.1	0.1		10.6	3.8	2.0	0.6	0.2
Eurozone	0.7	0.8	0.4	-0.1	-0.1		5.5	4.3	2.5	1.8	1.0
Germany	1.0	-0.1	0.5	-0.5	-0.3		3.8	1.7	1.4	0.8	-0.5
France	-0.1	0.5	0.2	0.0	0.2		4.5	4.0	1.1	0.6	0.9
Italy	0.1	1.0	0.4	-0.1	0.6		6.5	5.0	2.5	1.5	1.9
Japan	-0.7	1.4	-0.4	0.1	0.7		0.6	1.5	1.6	0.4	1.8
Australia	0.6	0.8	0.6	0.6	0.2		3.1	3.1	6.0	2.6	2.3

Source: Macrobond

Industrial Production Index (M/M Seasonally Adjusted)

		Month/Month % Change						Year/Year % Change						
	Jan	Feb	Mar	Apr	Мау		Jan	Feb	Mar	Apr	May			
US	1.0	0.0	0.1	0.5	-0.2		1.5	0.8	0.2	0.4	0.2			
Canada	0.5	0.5	0.1				1.9	1.9	0.9					
UK	-0.3	-0.1	0.8	-0.3			-3.0	-2.8	-2.0	-1.8				
Germany	3.5	1.7	-2.1	0.3			-0.8	0.9	2.1	1.8				
France	-2.1	1.5	-1.1	0.8			-2.2	0.9	-0.1	1.3				
Italy	-0.7	-0.1	-0.6	-1.9			1.7	-2.4	-3.2	-7.0				
Japan	-5.3	4.6	1.1	-0.4			-3.8	-1.4	-0.6	0.4				

Source: Macrobond

Unemployment Rate (Seasonally Adjusted)

	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23
US	3.5	3.7	3.5	3.7	3.6	3.5	3.4	3.6	3.5	3.4	3.7
Canada	4.9	5.3	5.2	5.2	5.1	5.0	5.0	5.0	5.0	5.0	5.2
UK	3.5	3.6	3.7	3.7	3.7	3.7	3.8	3.9	3.8		
Eurozone	6.7	6.7	6.7	6.7	6.7	6.7	6.6	6.6	6.6	6.5	
Germany	5.4	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6
France	7.3	7.2	7.1	7.2	7.2	7.2	7.1	7.0	7.0	7.0	
Italy	8.0	8.1	8.0	8.0	7.9	7.9	8.0	8.0	7.9	7.8	
Japan	2.6	2.5	2.6	2.6	2.5	2.5	2.4	2.6	2.8	2.6	
Australia	3.5	3.5	3.6	3.4	3.5	3.5	3.7	3.5	3.5	3.7	3.6

Source: Macrobond

Current Account Balance as a % of GDP (Seasonally Adjusted)

Current Account Balance as a 700 Gbi (Geasonally Adjusted)											
	Q3-20	Q4-20	Q1-21	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23
US	-3.2	-3.5	-3.4	-3.6	-3.8	-3.7	-4.5	-3.8	-3.4	-3.2	
Canada	-2.4	-1.4	0.0	-0.4	-0.6	0.0	0.6	0.7	-1.4	-1.2	-0.9
UK	-2.6	-6.6	-1.9	-0.4	-3.3	-0.4	-8.3	-4.6	-2.0	-0.4	
Eurozone	2.1	3.2	3.5	3.1	2.3	1.2	0.4	-1.3	-3.6	1.0	
Germany	7.3	8.3	9.0	8.3	7.6	6.6	5.6	4.0	2.6	4.9	6.0
France	-2.0	-0.4	0.5	0.7	0.4	-0.1	-0.2	-1.7	-3.5	-3.1	-0.8
Japan	4.3	3.7	4.6	4.2	3.6	4.0	3.4	3.1	3.4	3.5	3.5
Australia	-1.5	-2.5	-2.8	-3.5	-2.2	-2.7	-2.2	-1.4	-0.2	1.2	

Source: Macrobond

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* Pensions & Investments Research Center, as of December 31, 2021.

[†] This figure is presented as of September 30, 2022 and includes approximately \$55.12 billion of assets with respect to SPDR products for which State Street Global Advisors Funds Distributors, LLC (SSGA FD) acts solely as the marketing agent. SSGA FD and State Street Global Advisors are affiliated. Please note all AUM is unaudited.

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